Section 1. Registration Information

Source Identification

Facility Name:	Clearon Corp.
Parent Company #1 Name:	
Parent Company #2 Name:	

Submission and Acceptance

Submission Type:	Re-submission
Subsequent RMP Submission Reason:	5-year update (40 CFR 68.190(b)(1))
Description:	
Receipt Date:	06-Apr-2020
Postmark Date:	06-Apr-2020
Next Due Date:	06-Apr-2025
Completeness Check Date:	18-Apr-2022
Complete RMP:	Yes
De-Registration / Closed Reason:	
De-Registration / Closed Reason Other Text:	
De-Registered / Closed Date:	
De-Registered / Closed Effective Date:	
Certification Received:	Yes

Facility Identification

EPA Facility Identifier:	1000 0005 3014
Other EPA Systems Facility ID:	25303LNCRP95MAC
Facility Registry System ID:	

Dun and Bradstreet Numbers (DUNS)

Facility DUNS:	928869098
Parent Company #1 DUNS:	
Parent Company #2 DUNS:	

Facility Location Address

Street 1:	95 MacCorkle Ave., SW
Street 2:	
City:	South Charleston
State:	WEST VIRGINIA
ZIP:	25303
ZIP4:	
County:	KANAWHA

Facility Latitude and Longitude

Latitude (decimal):	38.367500
Longitude (decimal):	-081.706667
Lat/Long Method:	Interpolation - Map
Lat/Long Description:	Center of Facility
Horizontal Accuracy Measure:	25
Horizontal Reference Datum Name:	North American Datum of 1983
Source Map Scale Number:	24000

Owner or Operator

Operator Name:	Clearon Corp.
Operator Phone:	(b) (6)

Mailing Address

Operator Street 1:	95 MacCorkle Ave., SW
Operator Street 2:	
Operator City:	South Charleston
Operator State:	WEST VIRGINIA
Operator ZIP:	25303
Operator ZIP4:	
Operator Foreign State or Province:	
Operator Foreign ZIP:	
Operator Foreign Country:	

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person:	
RMP Title of Person or Position:	(b) (6)
RMP E-mail Address:	

Emergency Contact

Emergency Contact Name:	(b) (6)
Emergency Contact Title:	
Emergency Contact Phone:	
Emergency Contact 24-Hour Phone:	
Emergency Contact Ext. or PIN:	
Emergency Contact E-mail Address:	(b) (6)

Other Points of Contact

Facility or Parent Company E-mail Address:	
Facility Public Contact Phone:	(b) (6)
Facility or Parent Company WWW Homepage Address:	

Local Emergency Planning Committee

LEPC:	Kanawha Putnam LEPC

Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site:	123
FTE Claimed as CBI:	

Covered By

OSHA PSM :	Yes
EPCRA 302 :	Yes
CAA Title V:	Yes

Air Operating Permit ID:	R30039000112019

OSHA Ranking

OSHA Star or Merit Ranking:	

Last Safety Inspection

Last Safety Inspection (By an External Agency) Date:	19-Feb-2020
Last Safety Inspection Performed By an External Agency:	State environmental agency

Predictive Filing

Did this RMP involve predictive filing?:	

Preparer Information

Preparer Name:	
Preparer Phone:	
Preparer Street 1:	
Preparer Street 2:	
Preparer City:	
Preparer State:	
Preparer ZIP:	
Preparer ZIP4:	
Preparer Foreign State:	
Preparer Foreign Country:	
Preparer Foreign ZIP:	

Confidential Business Information (CBI)

CBI Claimed:	
Substantiation Provided:	
Unsanitized RMP Provided:	

Reportable Accidents

Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.

Process Chemicals

Process ID:	1000106989
Description:	
Process Chemical ID:	1000133811
Program Level:	Program Level 3 process
Chemical Name:	Chlorine
CAS Number:	7782-50-5
Quantity (lbs):	1260000
CBI Claimed:	
Flammable/Toxic:	Toxic

Process NAICS

Process ID:	1000106989
Process NAICS ID:	1000108262
Program Level:	Program Level 3 process
NAICS Code:	325998
NAICS Description:	All Other Miscellaneous Chemical Product and Preparation Manufacturing

Section 2. Toxics: Worst Case

Toxic Worst ID: 1000085862

Percent Weight:	100.0
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Release Duration (mins):	10
Wind Speed (m/sec):	1.5
Atmospheric Stability Class:	F
Topography:	Urban

Passive Mitigation Considered

Dikes:	
Enclosures:	
Berms:	
Drains:	
Sumps:	
Other Type:	

Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000091434

Percent Weight:	100.0
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Wind Speed (m/sec):	3.0
Atmospheric Stability Class:	D
Topography:	Urban

Passive Mitigation Considered

Dikes:	
Enclosures:	
Berms:	
Drains:	
Sumps:	
Other Type:	

Active Mitigation Considered

Sprinkler System:	
Deluge System:	
Water Curtain:	Yes
Neutralization:	
Excess Flow Valve:	Yes
Flares:	
Scrubbers:	
Emergency Shutdown:	Yes
Other Type:	Chlorine area detectors, surveillance cameras, continuous area monitoring

Section 4. Flammables: Worst Case

No records found.

Section 5. Flammables: Alternative Release

No records found.

Section 6. Accident History

Accident History ID: 1000066817

Date of Accident:	19-Feb-2020
Time Accident Began (HHMM):	0558
NAICS Code of Process Involved:	32518
NAICS Description:	Other Basic Inorganic Chemical Manufacturing
Release Duration:	001 Hours 06 Minutes

Release Event

Gas Release:	
Liquid Spill/Evaporation:	
Fire:	
Explosion:	
Uncontrolled/Runaway Reaction:	Yes

Release Source

Storage Vessel:	
Piping:	
Process Vessel:	
Transfer Hose:	
Valve:	
Pump:	
Joint:	
Other Release Source:	Conveying System

Weather Conditions at the Time of Event

Wind Speed:	0.5
Units:	miles/h
Direction:	NW
Temperature:	34
Atmospheric Stability Class:	F
Precipitation Present:	
Unknown Weather Conditions:	

On-Site Impacts

Employee or Contractor Deaths:	0
Public Responder Deaths:	0
Public Deaths:	0
Employee or Contractor Injuries:	0
Public Responder Injuries:	0
Public Injuries:	0
On-Site Property Damage ($):	100000

Known Off-Site Impacts

Deaths:	0
Hospitalization:	0
Other Medical Treatments:	0
Evacuated:	0

Sheltered-in-Place:	0
Off-Site Property Damage ($):	0

Environmental Damage

Fish or Animal Kills:	
Tree, Lawn, Shrub, or Crop Damage:	
Water Contamination:	
Soil Contamination:	
Other Environmental Damage:	

Initiating Event

Initiating Event:	Equipment Failure

Contributing Factors

Equipment Failure:	
Human Error:	Yes
Improper Procedures:	
Overpressurization:	
Upset Condition:	Yes
By-Pass Condition:	
Maintenance Activity/Inactivity:	
Process Design Failure:	
Unsuitable Equipment:	
Unusual Weather Condition:	
Management Error:	
Other Contributing Factor:	

Off-Site Responders Notified

Off-Site Responders Notified:	Notified and Responded

Changes Introduced as a Result of the Accident

Improved or Upgraded Equipment:	Yes
Revised Maintenance:	Yes
Revised Training:	Yes
Revised Operating Procedures:	Yes
New Process Controls:	Yes
New Mitigation Systems:	Yes
Revised Emergency Response Plan:	
Changed Process:	
Reduced Inventory:	
None:	
Other Changes Introduced:	

Confidential Business Information

CBI Claimed:	

Chemicals in Accident History

Accident Chemical ID:	1000053834
Quantity Released (lbs):	217
Percent Weight:	100.0
Chemical Name:	Chlorine
CAS Number:	7782-50-5
Flammable/Toxic:	Toxic

Section 7. Program Level 3

Description

No description available.

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000112916
Chemical Name:	Chlorine
Flammable/Toxic:	Toxic
CAS Number:	7782-50-5
Process ID:	1000106989
Description:	
Prevention Program Level 3 ID:	1000090737
NAICS Code:	325998

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	19-Aug-2019

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	27-Nov-2012

The Technique Used

What If:	
Checklist:	
What If/Checklist:	
HAZOP:	Yes
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	31-Dec-2013

Major Hazards Identified

Toxic Release:	Yes
Fire:	
Explosion:	
Runaway Reaction:	
Polymerization:	
Overpressurization:	
Corrosion:	Yes
Overfilling:	
Contamination:	
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	

Earthquake:
Floods (Flood Plain):
Tornado:
Hurricanes:
Other Major Hazard Identified:

Process Controls in Use

Vents:	Yes
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	Yes
Flares:	
Manual Shutoffs:	Yes
Automatic Shutoffs:	
Interlocks:	Yes
Alarms and Procedures:	Yes
Keyed Bypass:	
Emergency Air Supply:	
Emergency Power:	
Backup Pump:	
Grounding Equipment:	
Inhibitor Addition:	
Rupture Disks:	Yes
Excess Flow Device:	Yes
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	

Mitigation Systems in Use

Sprinkler System:	
Dikes:	
Fire Walls:	
Blast Walls:	
Deluge System:	
Water Curtain:	Yes
Enclosure:	
Neutralization:	
None:	
Other Mitigation System in Use:	

Monitoring/Detection Systems in Use

Process Area Detectors:	Yes
Perimeter Monitors:	
None:	
Other Monitoring/Detection System in Use:	

Changes Since Last PHA Update

Reduction in Chemical Inventory:
Increase in Chemical Inventory:
Change Process Parameters:

Installation of Process Controls:	
Installation of Process Detection Systems:	
Installation of Perimeter Monitoring Systems:	
Installation of Mitigation Systems:	
None Recommended:	
None:	Yes
Other Changes Since Last PHA or PHA Update:	

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):	12-Feb-2020

Training

Training Revision Date (The date of the most recent review or revision of training programs):	03-Apr-2017

The Type of Training Provided

Classroom:	Yes
On the Job:	Yes
Other Training:	

The Type of Competency Testing Used

Written Tests:	Yes
Oral Tests:	
Demonstration:	Yes
Observation:	
Other Type of Competency Testing Used:	

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures):	07-Jan-2020
Equipment Inspection Date (The date of the most recent equipment inspection or test):	27-Mar-2020
Equipment Tested (Equipment most recently inspected or tested):	D-502B Chlorinator

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):	26-Mar-2020
Change Management Revision Date (The date of the most recent review or revision of management of change procedures):	16-Apr-2015

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review):	26-Mar-2020

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit):	19-Aug-2019
Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):	01-Jul-2020

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):	31-Mar-2020
Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):	30-Apr-2020

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):	16-Dec-2019

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures):	23-Mar-2010

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):	19-Aug-2019
Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):	11-Nov-2019

Confidential Business Information

CBI Claimed:

Section 8. Program Level 2

No records found.

Section 9. Emergency Response

Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?):	Yes
Facility Plan (Does facility have its own written emergency response plan?):	Yes
Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):	Yes
Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?):	Yes
Healthcare (Does facility's ER plan include information on emergency health care?):	Yes

Emergency Response Review

Review Date (Date of most recent review or update of facility's ER plan):	10-Jul-2019

Emergency Response Training

Training Date (Date of most recent review or update of facility's employees):	31-Oct-2019

Local Agency

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated):	Kanawha Putnam EPC
Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated):	(304) 414-3600

Subject to

OSHA Regulations at 29 CFR 1910.38:	Yes
OSHA Regulations at 29 CFR 1910.120:	Yes
Clean Water Regulations at 40 CFR 112:	Yes
RCRA Regulations at CFR 264, 265, and 279.52:	Yes
OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254:	
State EPCRA Rules or Laws:	Yes
Other (Specify):	

Executive Summary

ACCIDENTAL RELEASE AND EMERGENCY RESPONSE POLICIES

At Clearon Corporation's South Charleston, WV Manufacturing Plant, we are committed to operating and maintaining all of our processes (especially those using hazardous substances) in a safe and responsible manner. We use a combination of accidental release prevention programs and emergency response planning programs to help ensure the safety of our employees and the public as well as protection of the environment. This document provides a brief overview of the comprehensive risk management acitivities that we have designed and implemented, including:

* A description of our facility and use of substances regulated by EPA's RMP regulation
* An overview of our accidental release prevention programs
* An overview of planned improvements at the facility to help prevent accidental chemical releases from occurring and adversely affecting our employees, the public, and the environment
* The certifications that EPA's RMP rule requires us to provide
* The detailed information (called data elements) about our risk management program

STATIONARY SOURCE AND REGULATED SUBSTANCES

Our facility produces chlorinated dry bleaches which are used extensively as sanitizers and disinfectants in detergents, cleansers, water treatment, and swimming pool and spa water treatment. The manufacture of our products utilizes a variety of chemicals and processing operations. One of our primary raw materials is chlorine, which EPA has identified as having the potential to cause significant offsite consequences in the event of a substantial accidental release. Chlorine is the only chemical at the Clearon Corp that is classified as a hazardous chemical. Manufacturing Plant which is subject to the EPA RMP rule. Chlorine is received in railroad tank cars and the maximum inventory at the site is 1,260,000 pounds. The inventory of chlorine is kept as low as practicable and the normal inventory is much less than the maximum level which is only reached during unusual supply situations.

KEY OFFSITE CONSEQUENCE ANALYSIS SCENARIOS

EPA's RMP rule requires that we provide information about the worst-case release scenario and alternative release scenario for our facility. The following are brief summaries of these scenarios:

Worst-case release scenario:
Our worst-case accident scenario involving chlorine would occur in the highly improbable event that the walls of a full 90-ton railroad tank car catastrophically fail, releasing the entire liquid chlorine contents within 10 minutes. According to EPA's RMP*COMP program, the distance to the endpoint of the cloud is 14 miles.

Alternate release scenario:
Our alternate release accident scenario involving chlorine would entail a puncture or other failure in a steel reinforced pipe system used in the chlorine railcar unloading process, with the 442 pounds liquid chlorine contents within the common Cl2 line being released within 10 minutes. According to EPA's RMP*COMP program, the distance to the endpoint of the cloud is 0.1 miles.

We are using this information to help ensure that our emergency response plan and the community emergency response plan address all reasonable contingency cases.

GENERAL ACCIDENTAL RELEASE PREVENTION PROGRAM AND CHEMICAL-SPECIFIC PREVENTION STEPS

We maintain a number of programs to help prevent accidental releases and ensure safe operation. The plant has a Process Safety Management/Risk Management Planning organization with management systems in place to ensure that all elements of the OSHA PSM and EPA RMP regulations are followed. All new facilities are subject to thorough hazard reviews during design, construction and startup utilizing a program called "Safety in Engineering, Technology, Construction, and Operations" (SETCO). This program is intended to eliminate or mitigate any possible releases of hazardous chemicals in the workplace or environment. The entire chlorine process was studied during a comprehensive Process Hazard Analysis (PHA) led by one of the leading U.S. process safety consulting companies in 1997.

As part of our prevention efforts, we have implemented the following chlorine-specific prevention steps to address the scenarios given above.

Worst-case release scenario:
* Movement of chlorine cars within the facility is highly controlled by both plant personnel and railroad personnel.
* The chlorine unloading station is isolated from other operations, thereby reducing exposure to fire or accidents. Cars positioned at the unloading station are protected by derail switches and monitored by video surveillance cameras.
Alternate release scenario:
* The chlorine unloading area is monitored by video surveillance cameras, periodic personnel inspections, and equipped with a number of highly sensitive chlorine detection instruments with alarms.
* A computerized operating system automatically monitors the chlorine system at all times.
* The chlorine unloading system is equipped with automatic shutoff valves and a railcar angle valve closure system. When the Emergency Shutdown System is activated from any of the three locations, the emergency shutoff valves will close and previously opened angle valves will close from attached air motors to ensure total isolation.
* The chlorine railcars are equipped with Railcar Motion Detectors. In the event of accidental movement of connected railcar(s) to the process, the Railcar Motion Detector will activate the emergency shutdown system, thus closing the emergency shutoff valves and closing all previously opened railcar angle valves to ensure total isolation.
* The system is equipped with pressure relief valves, which will vent chlorine to a scrubber in the event of an overpressurization.

FIVE-YEAR ACCIDENT HISTORY

We had one accident in February 2020 involving a decomposition that resulted in a reportable quantity release. No deaths or injuries resulted from this accident and there were no known offsite consequences. The accident has been investigated and action items are being completed.

EMERGENCY RESPONSE PROGRAM

We maintain an integrated contingency plan, which consolidates all of the various federal, state, and local regulatory requirements for emergency response planning. Our plant has designated and specially-trained emergency response teams on the site at all times. Our program provides the essential planning and training for effectively protecting workers, the public, and the environment during emergency situations. Furthermore, we coordinate our plan with the community emergency response plan.

PLANNED CHANGES TO IMPROVE SAFETY

No further plans at this time.